THE GENUS PARALINCUS (HEMIPTERA: PENTATOMIDAE)

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Abstract.—The genus Paralincus is diagnosed, the type species redescribed and the species keyed. One new species, Paralincus silvae Rolston, is described and the nominal genus Vauriana Ruckes relegated to the status of a junior synonym of Paralincus Distant.

The genus *Paralincus* is among those pentatomid genera recently transferred from Halyini in Pentatominae to Ochlerini in Discocephalinae (Rolston and McDonald, 1979; Rolston, 1981). Until now this genus has been monotypic, but during work on the ochlerines new generic synonymy and a new species of *Paralincus* were discovered, bringing the known number of species in this genus to three. These findings are reported here, a diagnosis of the genus is provided and the type species is redescribed.

The location of the eyes, separated from the anterior pronotal margin by about one half the eye diameter, together with the femoral armature distinguish this genus from other ochlerines.

Paralincus Distant

Paralincus Distant, 1911, pp. 246–247. Vauriana Ruckes, 1958, pp. 10–12. New Synonymy.

Diagnosis. Femora armed distally on inferior surface with small tubercles, these obscure or reduced in size and number on posterior femora. Eyes separated from pronotum by about half the diameter of an eye (Fig. 1). Interocular distance greater than distance across ocelli from lateral limit of one to lateral limit of other. Juga exceeding tylus, convergent apically, without anteocular process or subapical tooth. Antennae 5-segmented, basal segment slightly surpassing apex of head. Labium arising behind imaginary plane bisecting head at anterior limit of eyes; second segment reaching mesocoxae; last segment extending onto sternites 4–6. Anterior margin of pronotum shallowly concave. Coria surpassing apex of scutellum. Prosternum concave, meso- and metasterna thinly carinate along meson.

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Comment. Females have not been associated definitely with males. *Type species. Paralincus: Ochlerus terminalis* Walker, 1867, p. 195, by original designation. *Vauriana: Vauriana bimaculata* Ruckes, 1958, pp. 12–14, by original designation.

KEY TO MALES OF Paralineus Species

| 1. | Parameres capitate; antennal segments 2 and 3 subequal in length, segments 4 and 5 |
|----|---|
| | each about ¼ longer than 2 or 3 and subequal in length terminalis (Walker) |
| _ | Parameres laminate; antennal segments 2, 4 and 5 approximately same length, longer |
| | than 3 2 |
| 2. | Lateral pygophoral emargination arcuately concave (Fig. 5); head of parameres visible |
| | in emargination suboval, curving laterad apically silvae, new species |
| - | Lateral pygophoral emargination angular (Fig. 6); head of paramere visible in emar- |
| | gination subquadrangular bimaculatus (Ruckes) |

Paralincus terminalis (Walker)

Ochlerus terminalis Walker, 1867, p. 195. Paralincus terminalis: Distant, 1911, p. 247.

Redescription. Head 2.9 mm across eyes, 2.2 mm long; interocular width 1.4 mm; distance across ocelli from lateral limit of one to lateral limit of other 1.3 mm. Antennal segments 0.8, 1.3, 1.2, 1.7, 1.7 mm in length. Rostral segments 2–4 about 2.5, 2.2, 1.8 mm. Pronotum 6.9 mm wide at humeri, 3.0 mm long at meson. Scutellum 4.2 mm wide at base, 5.0 mm long. Length about 13 mm.

Vertex of head elevated, with double row of punctures on each side; U-shaped row of punctures from lateral margin of elevated vertex passing around ocellus and terminating at eye. Jugal surface impressed submarginally before eye where lateral margin concave. Apical third of antennal segment 4 and all of 5 pale. Rostrum brownish yellow.

Small tooth at anterolateral angles of pronotum narrowly rounded; anterolateral pronotal margin slightly sigmoid; humeri scarcely produced, weakly emarginated. Disk rugose, deeply punctured between rugae; collar reflexed as far laterad as ocelli, bordered where reflexed by dense punctation; cicatrices not well delineated, somewhat elevated.

Fovea in basal angles of scutellum rather large, with one deep impression and a few strong punctures. Base of scutellum marked mesially with small brownish yellow macule. Rugae and punctation of disk similar basally to that on scutellum, becoming less prominent beyond frena.

Costal angle of coria lying above penultimate abdominal segment; junction with membrane sinuous; inner angle broadly rounded. Endocoria each bearing large rufous macule; punctation moderately strong, weaking apically. Membrane dark, with about 12 veins. Connexivum partially exposed, fuscous, finely and somewhat sparsely punctate.

Punctation of pleura rather uniform, moderately strong, somewhat sparse. Coxae, trochanters and tarsi brownish yellow. Tubercles on inferior surface of front and middle femora in 2 irregular rows, obscure on hind femora.

Abdominal venter with broad shallow median sulcus on all but last segment, elsewhere with large shallow circular depressions centered on short seta. Brownish yellow band located submarginally on each side of abdominal venter interrupted broadly at sutures.

Pygophore deeply, arcuately emarginate from caudal view (Fig. 8). Interior ridge trisinuate, shallowly concave mesially. Head of parameres capitate with granulated area apically, visible from lateral view in convex emargination of extracted pygophore (Fig. 7).

Distribution. Known only from holotype, which came from an unspecified locality in Brazil.

Paralincus silvae, new species (Figs. 2–5)

Head 3.0–3.2 mm wide across eyes, 2.5–2.6 mm long; interocular width 1.6–1.7 mm; distance across ocelli from lateral limit of one to lateral limit of other 1.45–1.5 mm. Antennal segments 0.9–1.0, 1.6–1.8, 1.3–1.4, 1.9, 1.6–1.8 mm long. Rostral segments 2–4 about 2.4–2.8, 2.2–2.3, 2.0–2.1 mm long. Pronotum 7.6–7.9 mm wide at humeri, 3.4–3.6 mm long at meson. Scutellum 4.8–5.0 mm wide at base, 5.4–5.5 mm long. Length about 13.5–14.5 mm.

Aside from measurements, conforming to description of *P. terminalis* except as follows: A row of transversely elongated punctures on each side of head bordering elevated vertex which is rugosely and irregularly punctate. Abdominal venter entirely fuscous, lacking paler submarginal band on each side. Coxae, trochanters and tarsi dark brown to fuscous. All femora clearly tuberculate on inferior surface, the number of tubercles fewest on hind femora.

Lateral emargination of pygophore smoothly arcuate, with tiny acute tooth on cephalic edge of emargination (Fig. 5). Parameres laminate, curving laterad apically, granular on cephalic margin of lateral face (Figs. 2, 3). Theca without appendages; conjunctiva moderately sclerotized, bearing small dorsolateral lobe on each side and medioventral lobe; penisfilum nearly straight, slightly flanged apically (Fig. 4).

Holotype. &, labeled "Brazil, Para, Belem-Utinga. 07. IV. 1978. R. Neto." Deposited in Rijksmuseum van Natuurlijke Historie.

Paratypes. 288, "Surin. [illegible] 10 III 58 ([illegible]" (LHR); (a) "Ter. Ampa, Rio Ampari, J. Lane, Co." (b) [illegible] "16. VI. 65." (c) "Colecao J. Lane" (Museum de Zoologia de São Paulo).

Comments. Aside from substantial differences in the form of the pygophore and parameres, this species seems indistinguishable from *P. bimaculatus*. It

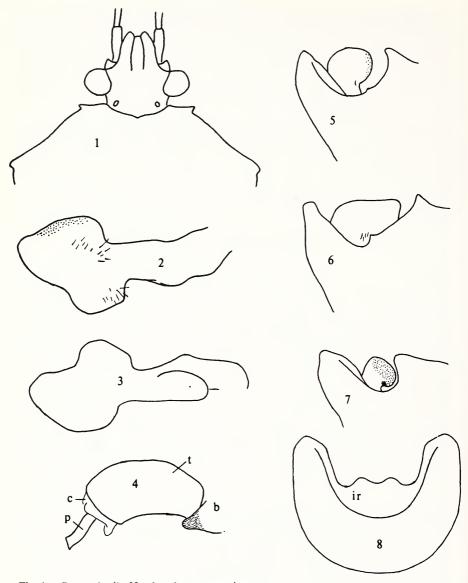


Fig. 1. P. terminalis. Head and pronotum in part.

Figs. 2-5. *P. silvae.* 2. Right paramere, lateral surface. 3. Same, rotated 180°, mesial surface. 4. Aedeagus; theca (t), penisfilum (p), conjunctiva (c), basal plate in part (b). 5. Lateral emargination of pygophore and head of paramere.

Fig. 6. P. bimaculatus. Lateral emargination of pygophore and distal part of paramere.

Figs. 7, 8. *P. terminalis.* 7. Lateral emargination of pygophore and head of paramere. 8. Caudal view of pygophore, parameres and proctiger omitted; inferior ridge (ir).

differs notably from *P. terminalis* in these respects also, and in the relative lengths of the antennal segments.

Paralincus bimaculatus (Ruckes), New Combination (Fig. 6)

Vauriana bimaculata Ruckes, 1958, pp. 12-14, fig. 1.

Ruckes (1958) described this species in detail and provided a habitus drawing. Other than the male genitalia, *P. bimaculatus* seems indistinguishable from the preceding species, *P. silvae*. The holotype of *Vauriana bimaculata* was examined and the genitalia figured (Fig. 6).

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LITERATURE CITED

- Distant, W. L. 1911. XXVIII—Rhynchotal notes—LIII. Neotropical Pentatomidae. Ann. & Mag. Nat. Hist. (8)7:242–258.
- Rolston, L. H. 1981. Ochlerini, a new tribe of Discocephalinae (Hemiptera: Pentatomidae).
 J. New York Entomol. Soc. 89(1):40–42.
- Rolston, L. H. and F. J. D. McDonald. 1979. Keys and diagnoses for the families of Western Hemisphere Pentatomoidea, subfamilies of Pentatomidae and tribes of Pentatominae (Hemiptera). J. New York Entomol. Soc. 87(3):189–207.
- Ruckes, H. 1958. New genera and species of neotropical discocephaline and halyine pentatomids (Heteroptera, Pentatomidae). Amer. Mus. Nov. no. 1868.
- Walker, F. 1867. Catalogue of the specimens of Hemiptera Heteroptera in the collection of the British Museum. London, 1:1-240.

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